

Wheel Guide Joint

Patent Claims

1. A wheel guide joint arrangement, especially for a driven axle of a motor vehicle, the joint arrangement comprising a joint fork (1), which can be arranged at a vehicle axle or at a wheel carrier, and a steering knuckle (2) carrying a wheel bearing (3), wherein said joint fork (1) and
5 said steering knuckle (2) can be pivotably connected to one another by means of two mounting points (4), (5), which are axially aligned with one another, characterized in that at least one of said two mounting points (4), (5) has a toroidal roller bearing.
2. A joint arrangement in accordance with claim 1, characterized in that one of said two
10 mounting points has a ball and socket joint (4).
3. A joint arrangement in accordance with claim 1 or 2, characterized in that said toroidal roller bearing is arranged in a pot-shaped recess (9) of said joint fork (1) or of said steering knuckle (2).
4. A joint arrangement in accordance with claim 3, characterized in that said pot-shaped recess
15 (9) of said joint fork (1) or of said steering knuckle (2) has a peripheral collar in the area of the bottom of said recess (9).
5. A joint arrangement in accordance with one of the claims 1 through 4, characterized in that the at least one said elastic body (10) is arranged between the outer ring of said toroidal roller bearing (6) and an essentially cylindrical wall of said pot-shaped recess (9).
6. A joint arrangement in accordance with claim 5, characterized in that said elastic body (10) is a
20 ring with an essentially circular cross section.

7. A joint arrangement in accordance with one of the claims 1 through 6, characterized in that said toroidal roller bearing is covered with a seal (11) on the side facing away from the bottom of said pot-shaped recess (9), wherein said seal (11) seals both the rolling bodies of said toroidal roller bearing and a gap (13) between said bearing outer ring (6) and said pot-shaped recess (9) and a gap (12) between said bearing inner ring (7) and said bearing journal (14) against environmental effects.

8. A joint arrangement in accordance with claim 7, characterized in that said seal (11) has a first edge or lip as well as a second edge or lip (15) in the area of an inner circumference (12), wherein said seal (11) is supported with said first edge radially at said bearing journal (14) and with said second edge (15) axially at said collar of said bearing journal (14).